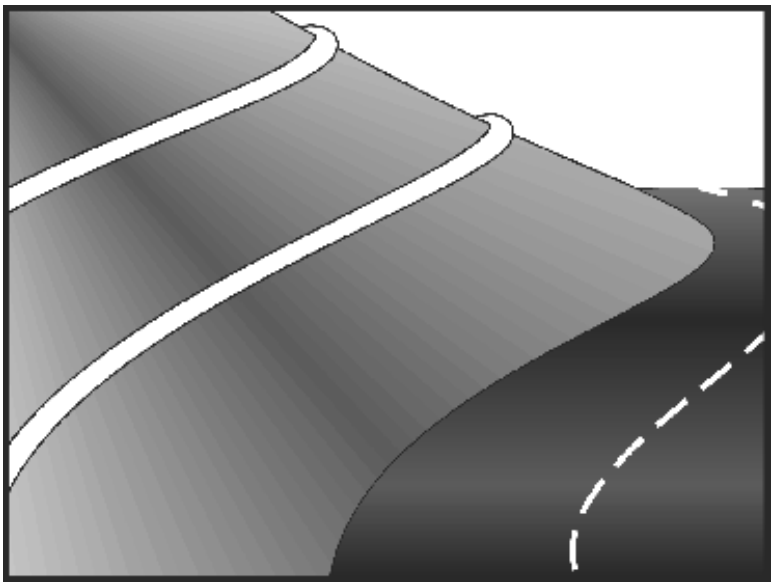
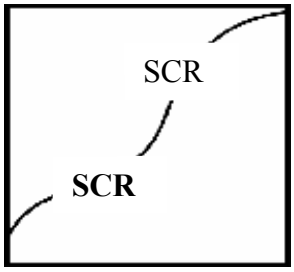
SYNTHETIC SEDIMENT CONTROL ROLLS SC-11





MAP SYMBOL

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Purpose: Synthetic Sediment Control Rolls (SCRs) trap detached sediments, reduce slope lengths, and decrease runoff velocity while allowing runoff to filter through the device. SCRs are reusable and constructed of overlapping layers of perforated polymeric sheets in hollow tubular assemblies. SCRs include location flaps and connecting sleeves and one or more filter sheets can be inserted into the SCRs to provide additional sediment filtration. When used in combination with erosion control practices such as slope tracking, mulching and/or soil binders, SCRs can provide effective sediment control.

Application:

- Along the toe, top or face of slopes to reduce slope length and spread runoff as sheet flow.
- At grade breaks where slopes transition from shallow to steep.
- Applicable along the face of slopes with a steepness of 2H:1V or less.
- As check dams in drainage swales.
- Along streambanks.
- If properly anchored, to protect storm drain inlets.
- Down-slope of exposed soil areas.
- Around temporary stockpiles.
- Along the perimeter of a project.

Limitations:

- Use at the toe of slopes may require the use of larger diameter SCRs and/or linear sediment barriers such as silt fences.
- SCRs have limited sediment capture capacity and sediment must be removed when it reaches two thirds (2/3) of the device height.
- Do not use SCRs on slopes subject to creep, slumping, or landslide.
- Soil disturbance and erosion may occur during removal of SCRs.

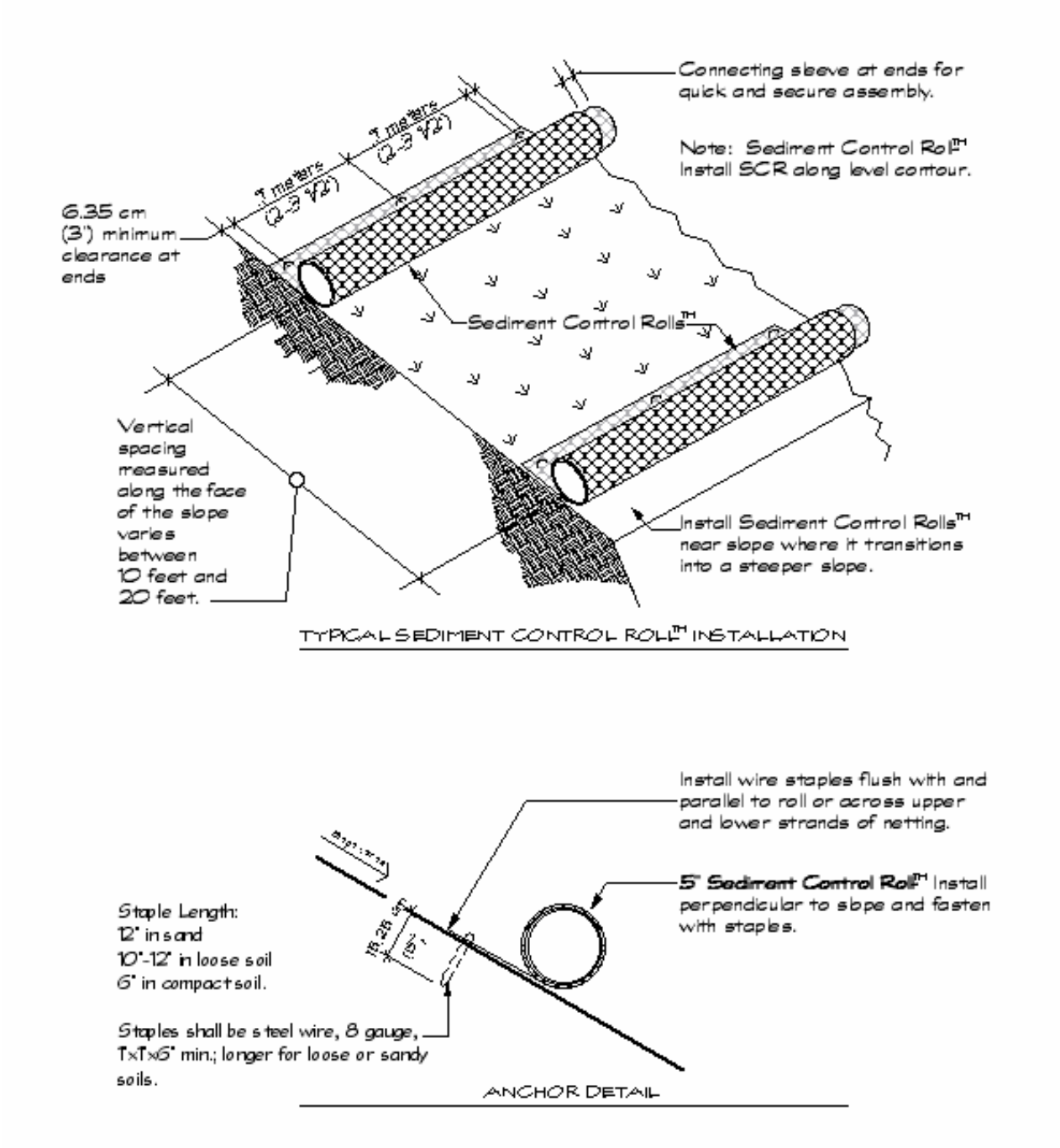
Standards and Specifications:

- SCRs should be configured from at least 95% Recyclable HDPE (#2) by weight and should be UV stabilized.
- Materials used in the manufacture of SCRs should be chemically resistant to acids and bases, hydrocarbons and other materials typically found at construction sites.
- Materials used in the manufacture of SCRs should not be edible to animals.
- SCRs should be reusable for at least 4 years.
- Materials used in the manufacture of SCRs should not contain seeds with the potential of causing invasion of noxious weeds.
- SCRs should be cut-to-length in the field, with standard handsaws, for field configurations, as required.
- SCRs provide variable filtration as per the requirements of the site.
- For slopes with a steepness of 4H:1V or flatter, SCRs shall be placed a maximum of 20 ft apart.
- For slopes with a steepness of 2H:1V to 4H:1V, SCRs shall be placed a maximum of 15 ft apart.
- Install SCRs on the soil surface, insuring that no gaps exist between the soil and the bottom of the SCR. Then ends of adjacent SCRs should be connected via the sleeve insert so that no opening exists for sediment to pass through.
- If necessary to create a turn (i.e. 45 deg or 90 deg), SCRs may be butted together tightly (by removing the sleeve insert) in such a way that no opening exists for sediment to pass through.
- SCRs do not require trenching. If properly stapled, the "location flap" should reduce potential undermining and undercutting.

- Steel Staples (Wire Staple 8 guage 1" X 1" X 6" minimum – longer for loose or sandy soils) should be driven through the "location flap" into the soil at a minimum of 3 staples per 5 foot length. More staples can be used where necessary (loose soil, or high flow areas). Staples should be oriented parallel to the SCR in order to insert around both strands (top and bottom strands of the flap netting).
- The last in-line SCR may be dog-legged up-slope to ensure sediment containment.

Inspection and Maintenance:

- Repair or replace split or torn SCRs.
- Inspect SCRs when rain is forecast and after storm events. Perform maintenance as needed.
- Maintain SCRs to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches two thirds (2/3) of the barrier height. Removed sediment shall be incorporated back onto the project or disposed of outside the project in conformance with local requirements.
- When no longer required for the intended purpose, temporary SCRs shall be removed from the site and stored for reuse or relocated to another location on the project. If not reusable due to damage, SCRs can be recycled as #2 (HDPE).
- SCRs can be left in place to degrade over time as native and applied vegetation ultimately stabilize the repaired site.
- If SCRs are removed, collect and dispose of sediment accumulation, and fill and compact ground disturbances to blend with adjacent ground.



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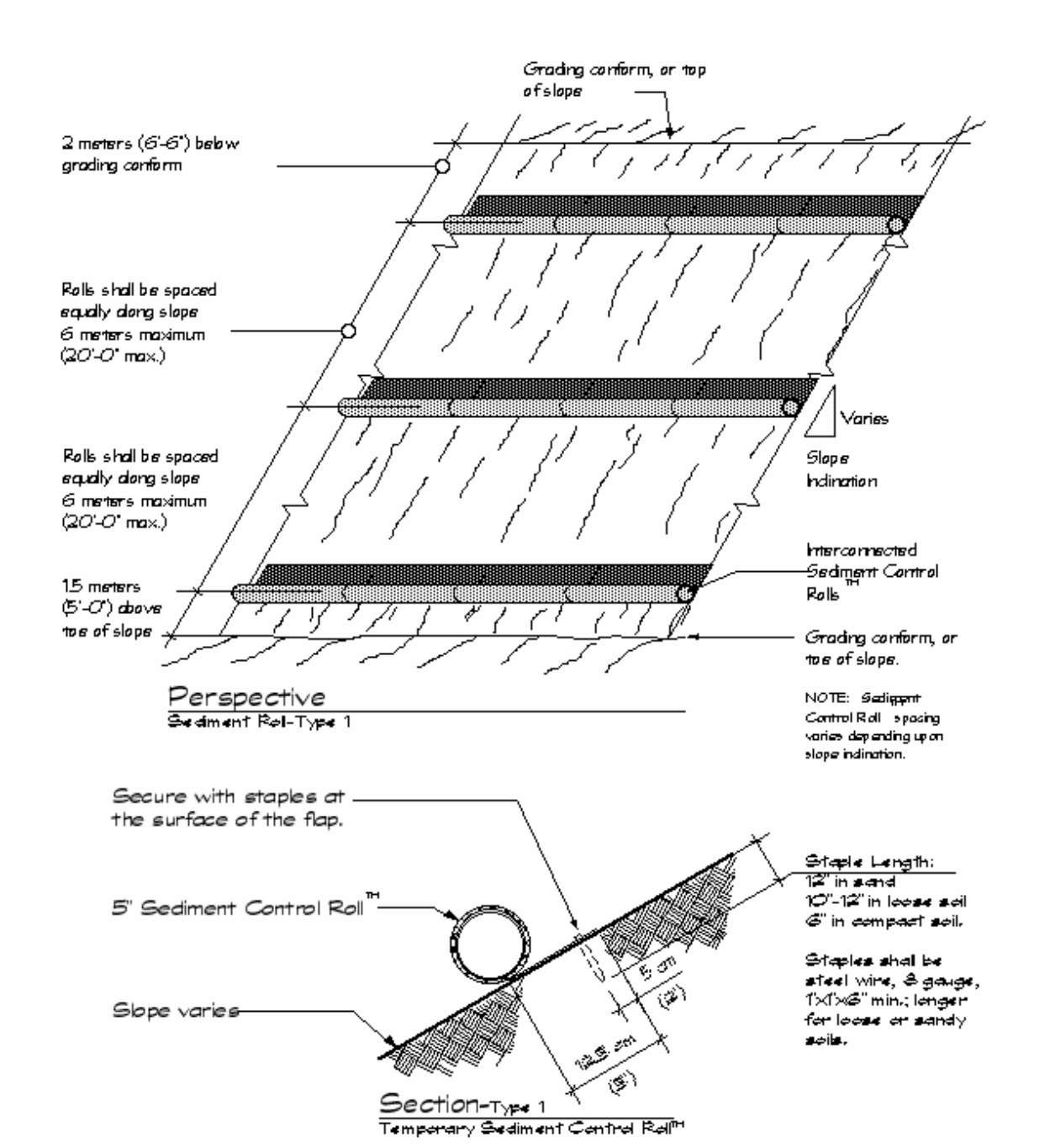

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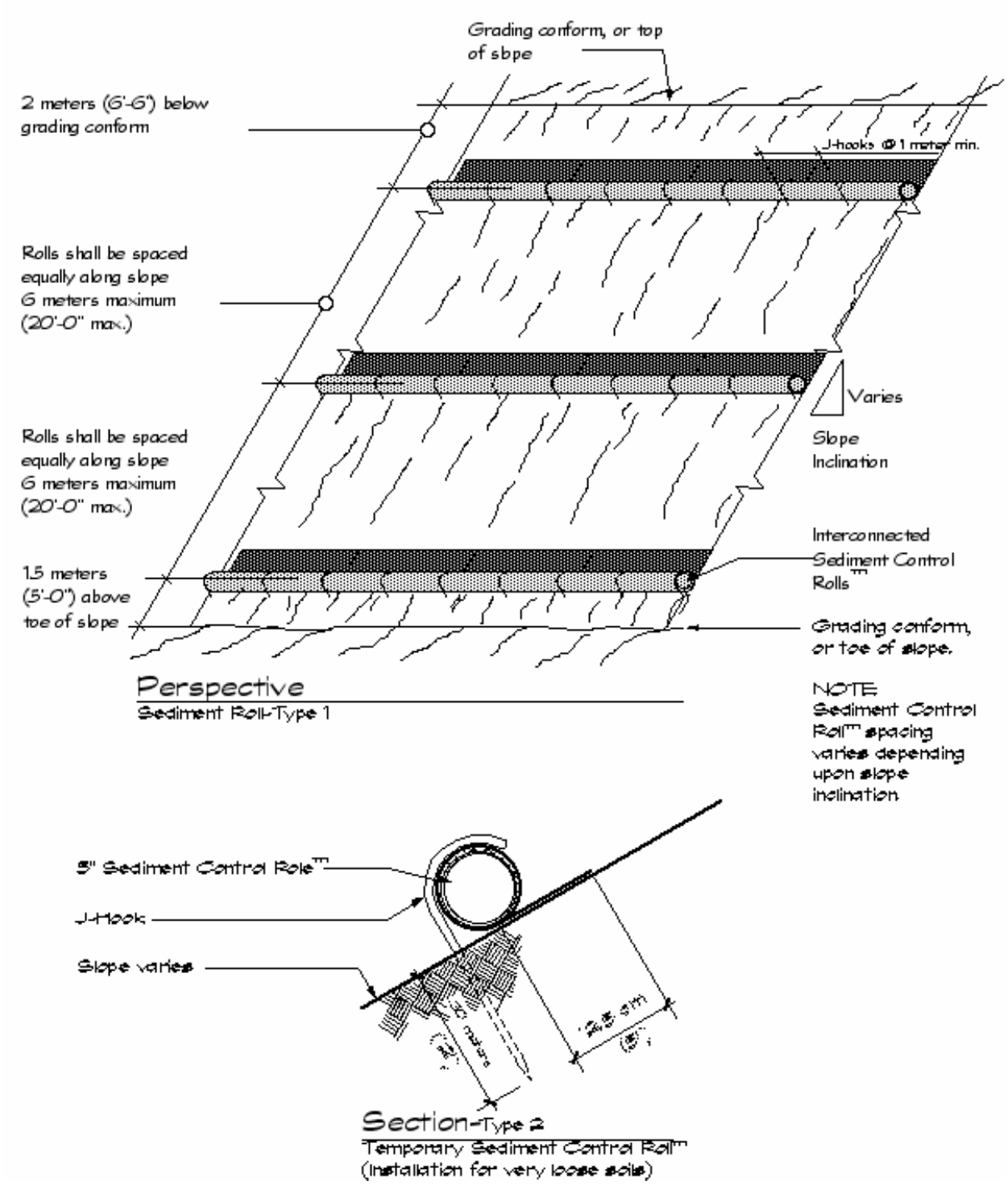

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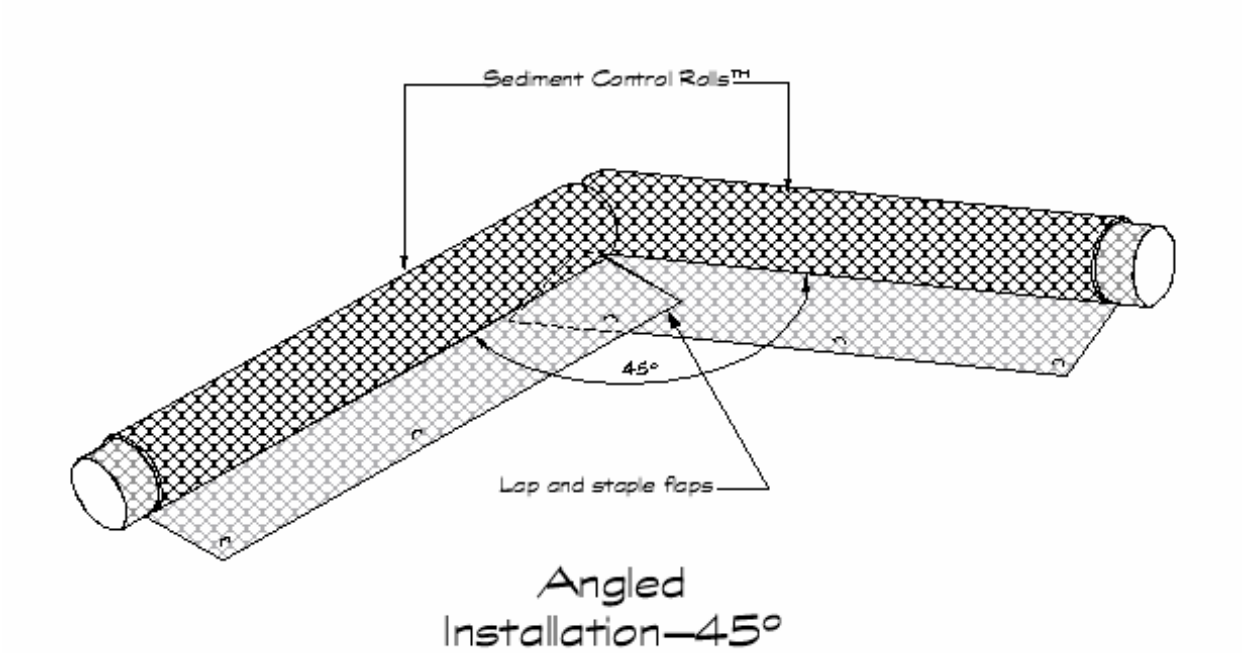
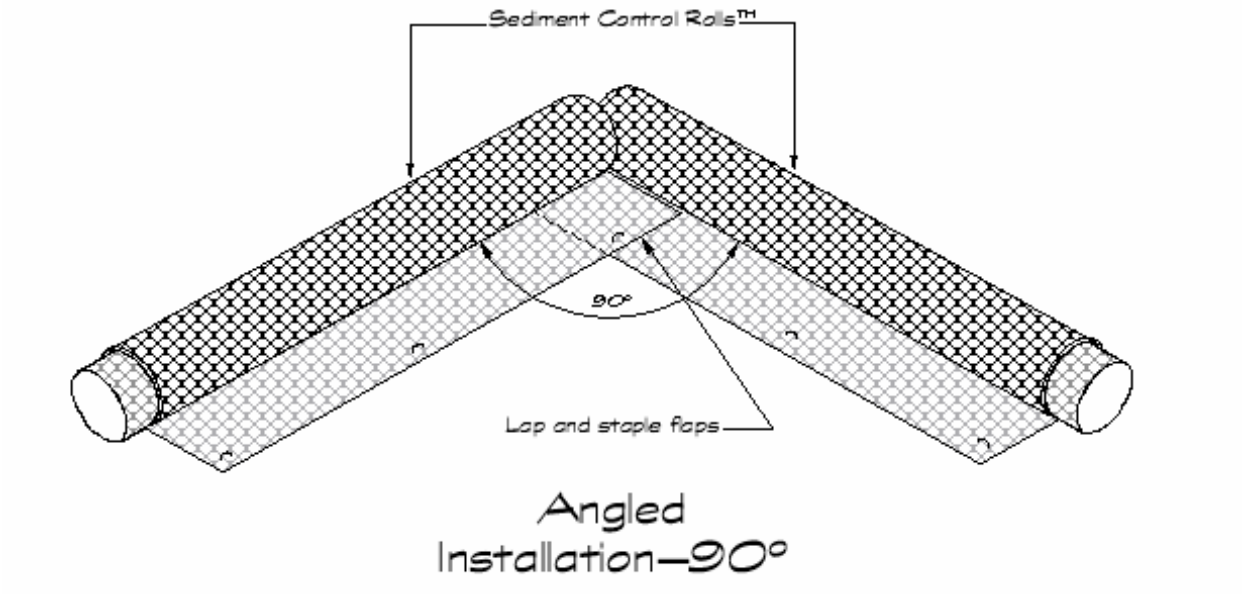


Angled Installation—45°



Angled Installation—90°

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